

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
AT SEATTLE

CITY OF SEATTLE,

Plaintiff,

v.

MONSANTO COMPANY, *et al.*,

Defendants.

Case No. C16-107-RAJ-MLP

ORDER

I. INTRODUCTION

This matter is before the Court on: (1) Plaintiff City of Seattle’s (“City”) “Motion to Exclude Proposed Expert Testimony by David L. Sunding” (Pl.’s Sunding Mot. (dkt. # 615)) and “Motion to Strike Supplemental Report of David L. Sunding” (Pl.’s Sunding Strike Mot. (dkt. # 617)); (2) the City’s “Motion to Exclude and Strike Expert Testimony by David Eaton” (Pl.’s Eaton Mot. (dkt. # 619)); (3) Defendants Monsanto Company, Solutia Inc., and Pharmacia LLC’s (“Defendants” or “Monsanto”) “*Daubert* Motion to Exclude the Expert Testimony of Richard DeGrandchamp” (Defs.’ DeGrandchamp Mot. (dkt. # 628)); and (4) Defendants’ “*Daubert* Motion to Exclude Certain Opinions and Testimony of Plaintiff’s Expert Allison Hiltner” (Defs.’ Hiltner Mot. (dkt. # 635)).

1 The parties have filed responses (Defs.' Sunding Resp. (dkt. # 685); Defs.' Sunding
2 Strike Resp. (dkt. # 687); Defs.' Eaton Resp. (dkt. # 690); Pl.'s DeGrandchamp Resp. (dkt.
3 # 654); Pl.'s Hiltner Resp. (dkt. # 664)) and replies (Pl.'s Sunding Reply (dkt. # 702); Pl.'s
4 Sunding Strike Reply (dkt. # 704); Pl.'s Eaton Reply (dkt. # 705); Defs.' DeGrandchamp Reply
5 (dkt. # 714); Defs.' Hiltner Reply (dkt. # 716)) on the respective motions. The Court heard oral
6 argument from the parties on September 11, 2023. (Dkt. # 780.)

7 Having considered the parties' submissions, oral argument, the balance of the record, and
8 the governing law: (1) the City's Sunding Motions (dkt. ## 615, 617) are GRANTED; (2) the
9 City's Eaton Motion (dkt. # 619) is GRANTED; (3) Defendants' DeGrandchamp Motion (dkt.
10 # 628)) is DENIED; and (4) Defendants' Hiltner Motion (dkt. # 635) is GRANTED in part and
11 DENIED in part, as further explained below.

12 II. BACKGROUND

13 This case arises out of Defendants' manufacture and sale of polychlorinated biphenyls
14 ("PCBs"). Through this lawsuit, the City seeks to hold Defendants liable for PCBs that have
15 escaped from their use in industrial and commercial applications into the Lower Duwamish
16 Waterway ("LDW") and the City's stormwater and drainage systems. (*See* Second Am. Compl.
17 (dkt. # 267) at ¶¶ 5-15.) The City's sole remaining cause of action alleges Defendants
18 intentionally manufactured, distributed, marketed, and promoted PCBs in a manner that created a
19 public nuisance harmful to the health and free use of the LDW and the City's stormwater and
20 drainage systems. (*Id.* at ¶¶ 91-108.) Defendant Pharmacia LLC (a/k/a "Old Monsanto") was the
21 sole producer of PCBs in the United States from the 1930s until they were banned by Congress
22 in 1977. (*Id.* at ¶ 38.)
23

1 The City's complaint alleges Old Monsanto knew its PCBs would get into the
2 environment and waterbodies, such as the LDW, through their ordinary use, and that Old
3 Monsanto's knowledge was based in part on its sales of PCBs to businesses near the LDW and
4 its own use of PCBs at its vanillin plant that operated adjacent to the LDW. (Second Am. Compl.
5 at ¶¶ 61-79.) The City alleges it has incurred past costs, and will incur future costs, for
6 investigation and remediation of the LDW, its source control efforts in the LDW, and for the
7 design and construction of a stormwater treatment plant to reduce PCBs from one drainage basin
8 adjacent to the LDW. (*Id.* at ¶¶ 8, 10, 15, 104-05.)

9 Relevant to the instant motions, in 2001, the EPA listed the LDW as a Superfund Site.
10 The U.S. Environmental Protection Agency ("EPA") issued a Record of Decision ("ROD") in
11 2014 for the remediation of the LDW Superfund Site, which references 43 chemicals that have
12 accumulated in the LDW due to assorted industrial and municipal practices. (*See* Woerner
13 Omnibus Decl., Ex. B (dkt. # 623-2).) The ROD contains a human health risk assessment
14 prepared by the EPA, which determined that four of the contaminants in the LDW presented
15 unacceptable risks to human health: PCBs, arsenic, dioxins/furans, and carcinogenic
16 polycyclic aromatic hydrocarbons ("cPAHs"). (*Id.* at 39.) For the cleanup of the LDW, the EPA
17 estimated a total cost of \$342 million in the ROD. (*Id.* at 91.)

18 In addition, in 2005, the Washington State Department of Health ("DOH") determined it
19 was unsafe for people to eat LDW resident seafood (fish or shellfish that reside in the LDW) due
20 to PCB contamination. (Woerner Omnibus Decl., Ex. A (dkt. # 623-1) at 9.) In the ROD, the
21 EPA identified resident seafood in the LDW as a risk to human health (*See id.*, Exs. B (dkt.
22 # 623-2) at 29, 53, C (dkt. # 623-3) at 2.) As a result, the EPA found the remedial actions
23

1 described in its ROD would be necessary to reduce human health risk from consumption of
2 LDW resident seafood. (*See id.*, Ex. B at 134-35.)

3 Based on these allegations, the following experts have been set forth by the parties to
4 testify regarding LDW angler population and resident seafood consumption estimates, human
5 health effects of consuming LDW resident seafood, the toxicological impact of PCBs, and the
6 impact of PCBs on the contamination to the LDW and human health:

7 **A. Dr. Sunding**

8 Dr. Sunding is a professor at the University of California, Berkley, who holds a Ph.D. in
9 agricultural and resource economics. (First Gotto Decl., Ex. A (dkt. # 616-1) at 1.) Dr. Sunding
10 has previously served as a testifying expert in environmental matters involving groundwater and
11 surface water contamination, natural resource damages, environmental health risk, the use of
12 surveys, water resource management, and econometrics. (*Id.* at 2; *see id.* at App'x. A at 15-18.)

13 Dr. Sunding issued an expert report in this case that offered opinions on the rates of
14 recreational angling and fish consumption in the LDW. (*See* First Gotto Decl., Ex. A at 2.) Dr.
15 Sunding's first opinion estimated the numbers of LDW anglers for the summers of 1997 and
16 2015, and whether the number of anglers had declined over that period because of fish
17 consumption advisories. (*Id.* at 2-3.) The second opinion estimated the amount of LDW resident
18 seafood consumed by LDW anglers and by those with whom LDW anglers share their catch.
19 (*Id.*)

20 To estimate the LDW angler population, Dr. Sunding examined data from the Mayfield
21 Study, which collected survey information from LDW anglers across a 10-week period in the
22 summer of 1997. (First Gotto Decl., Ex. A at 11-15.) Based on his examination of the Mayfield
23 data, and application of a statistical technique known as the Chao estimator, Dr. Sunding

1 estimated there were 344 LDW anglers who caught fish in the summer of 1997. (*Id.* at 23-24.)
2 Dr. Sunding applied an expected fishing decline rate of 1.79% per year to this estimate, due to
3 local and regional fishing trends, which provided a “but-for” population estimate of 248 LDW
4 anglers who Dr. Sunding expected would still be fishing if there had been no fish consumption
5 advisories. (*Id.*) Based on examined data from the Windward Study, which was conducted in
6 2015 and found an “actual” LDW angling population of 254, Dr. Sunding concluded that
7 “[b]ecause the but-for angler population is slightly lower than the actual angler population, I do
8 not find evidence that fish consumption advisories reduced the LDW resident species angling
9 population.” (*Id.* at 23.) As a result, Dr. Sunding concluded the “decrease in angling in the LDW
10 is consistent with general angling trends in Washington State and the Pacific region of the United
11 States,” and as such, would not be attributable to LDW fish consumption advisories. (*Id.* at 32.)

12 For his calculation of LDW resident seafood consumption, Dr. Sunding’s initial report set
13 forth the following equation:

$$\text{Consumption rate (g/day)} = (\text{meals of consuming seafood from LDW per year} \times \text{portion size}) / (\text{number of people in the family sharing the catch} \times 365 \text{ days per year})$$

16 (First Gotto Decl., Ex. A at 24-25.) Based on his analysis of the Mayfield data, Dr. Sunding
17 calculated consumption rates for non-tribal adults and children among the LDW angler
18 population. (*Id.* at 25-30.) Based on his calculated rates, Dr. Sunding concluded the presence of
19 fish consumption advisories in the LDW had also not reduced the likelihood an LDW angler
20 consumes their catch of resident species because “[f]ish consumption from the LDW is low, with
21 only 42% of anglers consuming their catch and, among that group, they only consume the
22 equivalent of 6 fish meals per year.” (*Id.* at 32.)
23

1 On June 1, 2022, Dr. Sunding provided a supplemental report that revised his LDW
2 angler population estimates and provided updated fish consumption estimates based on a revised
3 fish consumption formula. (*See* First Gotto Decl., Ex. C (dkt. # 616-3) at 1-2.) Dr. Sunding’s
4 supplemental report modified three areas from his initial report. First, Dr. Sunding revised his
5 estimate of LDW anglers in 1997 from 344 anglers to 522 anglers based on a “coding error.” (*Id.*
6 at 1.) Second, Dr. Sunding modified his LDW resident seafood consumption rate formula by
7 adjusting it to remove the factor for the number of people sharing the catch from the formula’s
8 denominator. (*Id.* at 1-2, 5.) Third, Dr. Sunding reinterpreted his interpretation of a Mayfield
9 survey response, explaining that he had erroneously understood the response to mean the
10 respondent “consumed a 6[-]ounce portion of crab 365 days a year” which upon further
11 assessment he determined was an overestimation of that individual’s seafood consumption. (*Id.*
12 at 1.)

13 **B. Dr. Eaton**

14 Dr. Eaton is a professor emeritus of environmental and occupational health sciences at
15 the University of Washington School of Public Health, who has taught in areas of toxicology for
16 over 40 years. (Wagner Eaton Decl., Ex. A (dkt. # 620-1) at 1-2.)

17 Relevant to the City’s challenged portions of Dr. Eaton’s report, Dr. Eaton’s “First Major
18 Opinion” opines as to PCB intake levels that would create an unacceptable risk for human health
19 based on exposure and risk assessment calculations for four human health risks: (1) cancer; (2)
20 toxicity to the immune system; (3) adverse neurodevelopment outcomes; and (4) adverse
21 reproductive outcomes. (Wagner Eaton Decl., Ex. A at 3-4.) Dr. Eaton’s calculations for human
22 health risk required input and consideration of LDW fish consumption to evaluate the specified
23 human health risk areas. (*See e.g., id.* at 59-61 (cancer), 273-74 (immune system), 301-02,

1 304-07 (neurodevelopment), 329 (reproduction).) Dr. Eaton ultimately opines levels of PCBs
2 measured in edible seafood in the LDW do not render it unsafe for human consumption. (*Id.* at
3 3-4.) In reaching this conclusion, Dr. Eaton's report relied on Dr. Sunding's seafood
4 consumption estimates. (*See e.g., id.* at 3-4, 31-32, 301, 373.)

5 On July 7, 2022, Dr. Eaton provided a supplemental report updating his exposure and risk
6 assessment calculations provided in his initial expert opinion based on Dr. Sunding's revised fish
7 consumption formula and estimates. (Wagner Eaton Decl., Ex. C (dkt. # 620-3) at 1.) Dr. Eaton's
8 supplemental report opines that incorporation of Dr. Sunding's revised consumption estimates
9 did not change his opinion that levels of PCBs measured in edible seafood in the LDW did not
10 make it unsafe for human consumption. (*Id.* at 3-4.)

11 **C. Dr. DeGrandchamp**

12 Dr. DeGrandchamp is a professor of toxicology at the University of Colorado, who has
13 practiced in the field of toxicology for over 34 years. (DeBord DeGrandchamp Decl., Ex. A (dkt.
14 # 631-1) at 5-6, 459-70.) Dr. DeGrandchamp's work has included study and analysis regarding
15 human health risk assessments, including PCB toxicity testing and animal cancer studies. (*Id.*)
16 Dr. DeGrandchamp has also served as an expert witness and previously testified in at least four
17 other cases against Monsanto in claims involving PCBs. (*Id.* at 471.)

18 In this case, Dr. DeGrandchamp submitted an extensive expert report covering several
19 opinions relating to the history of toxicity testing, industry standards and protocols for toxicity
20 testing from the 1930s through the 1960s, Monsanto's knowledge of PCB toxicity, PCB
21 bioaccumulation and persistence, and the results of early animal testing of PCBs. (*See* DeBord
22 DeGrandchamp Decl., Ex. A.) Relevant to the motion in this case, Dr. DeGrandchamp opines
23 animal cancer testing as early as the 1940s, using the available protocols and standards of the

1 time, would have demonstrated PCBs were carcinogenic based on Monsanto's knowledge of the
2 shared physiochemical properties between PCBs and dichlorodiphenyltrichloroethane ("DDT").
3 (*See id.* at 30-31, 35, 46, 164.)

4 **D. Ms. Hiltner**

5 Ms. Hiltner was a Remedial Project Manager with the EPA's Superfund program from
6 1986 until 2015. (DeBord Hiltner Decl., Ex. A (dkt. # 637-1) at 2.) Ms. Hiltner's career focused
7 on the investigation and cleanup of contaminated sediment Superfund sites. (*Id.*) From 2015 to
8 2019, she served as a policy advisor to the EPA, where she provided senior review, advice, and
9 oversight to other remedial project managers in the EPA's Superfund program. (*Id.*)

10 Ms. Hiltner was the lead project manager in charge of the LDW Superfund site from
11 2001 to 2015. (DeBord Hiltner Decl., Ex. A at 2.) In that capacity, Ms. Hiltner led the team that
12 investigated the contamination of the LDW, developed the cleanup plan, and wrote the EPA's
13 ROD and associated Responsiveness Summary. (*Id.*) While serving as the remedial project
14 manager for the LDW, Ms. Hiltner assembled a team to review the human health risk assessment
15 prepared by the Lower Duwamish Waterway Group, including an EPA Human Health Risk
16 Assessor, and she ultimately had the responsibility of approving the human health risk
17 assessment to address EPA comments. (Hiltner Decl. (dkt. # 665) at ¶¶ 7-9.)

18 *i. Expert Opinion*

19 Per her initial expert report, and relevant to her challenged opinions in this case, Ms.
20 Hiltner opined PCBs were the "principal factor" in the EPA's decision to list the LDW on the
21 National Priorities List ("NPL") in 2001. (DeBord Hiltner Decl., Ex. A at 1, 4-5.) On this point,
22 Ms. Hiltner noted "PCBs are the most widespread contaminant in LDW surface . . . and
23

1 subsurface sediments” (*id.* at 1) and that PCBs were detected in 91% of the surface samples
2 analyzed for PCBs during the EPA’s initial Site Inspection of the LDW in 1999 (*id.* at 4).

3 In addition, Ms. Hiltner opined that PCBs are the primary driver for human health risk in
4 the LDW. (DeBord Hiltner Decl., Ex. A at 1, 7-10.) Ms. Hiltner noted that the human health risk
5 assessment conducted for the LDW ROD determined people could be exposed to contamination
6 through consumption of LDW resident fish and shellfish and that the highest health risks were
7 associated with consuming contaminated resident fish and shellfish. (*Id.* at 7.) She noted that
8 though the human health risk assessment identified PCBs, arsenic, cPAHs, and dioxins/furans as
9 contaminants contributing the most to human health risk, “PCBs are responsible for most of the
10 seafood consumption risk at the LDW for every type of resident fish and shellfish” (*Id.* at
11 8.)

12 Last among Ms. Hiltner’s challenged opinions, Ms. Hiltner opined that “controlling
13 ongoing sources of PCBs to the LDW is critical to prevent recontamination and to further reduce
14 the threat to human health and the environment.” (DeBord Hiltner Decl., Ex. A at 14.) She noted
15 that the ROD contemplated a source control program would be crucial to the success of the LDW
16 cleanup, to achieve the long-term reduction in contaminant concentrations, and to minimize
17 recontamination. (*Id.*)

18 *ii. Rebuttal Opinion*

19 Ms. Hiltner provided a rebuttal expert report to several of Defendants’ experts, including
20 Dr. Sunding, Dr. Eaton, Dr. Paul Boehm, and Dr. Michael Kavanaugh. (DeBord Hiltner Decl.,
21 Ex. B (dkt. # 637-2) at 1.) In sum, as to Dr. Boehm, Ms. Hiltner rebuts the bulk of his analysis
22 supporting his opinions that PCBs are not present at levels that indicate risk to “fish or
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1 piscivorous wildlife” and that LDW cleanup would have been required without consideration of
2 PCBs because:

- 3 (1) Human health risks from PCBs occur at lower levels of contamination than
4 ecological risks,
- 5 (2) Dr. Boehm uses inappropriate criteria to evaluate risks to the health of
6 ecological resources, and
- 7 (3) Dr. Boehm’s analysis does not consider the need to remove subsurface
8 sediments contaminated with PCBs to address risks due to potential
9 exposure of these sediments in the future.

8 (*Id.*)

9 As to Dr. Kavanaugh, Ms. Hiltner rebuts his opinion that less than 4% of the projected
10 future costs of the LDW are based on PCBs alone “rests on the assumption that absent PCBs, the
11 EPA would have selected the same remedy to address the other contaminants present in the
12 LDW.” (DeBord Hiltner Decl., Ex. B at 6.) Ms. Hiltner offers rebuttal that: (1) Absent PCBs,
13 EPA may not have listed the LDW as a Superfund site; and (2) Absent PCBs, it is unlikely the
14 cleanup footprint would be the same as the one selected in the EPA’s ROD. (*Id.* at 6-7.)

15 Finally, Ms. Hiltner offers rebuttal opinions to both Dr. Sunding and Dr. Eaton. (DeBord
16 Hiltner Decl., Ex. B at 9-16.) As to Dr. Sunding, Ms. Hiltner opines that Dr. Sunding’s analysis
17 utilizes “inappropriate studies and faulty assumptions to derive extremely low estimates of LDW
18 fish and shellfish consumption rates.” (*Id.* at 9.) Ms. Hiltner concludes Dr. Sunding’s analysis is
19 faulty because: (1) it is inconsistent with EPA guidance, policy, and methodology for conducting
20 human health risk assessments and Washington State law; and (2) it incorporates inappropriate
21 studies and faulty assumptions to conclude current fish and shellfish consumption rates are not
22 suppressed due to the presence of fish and shellfish consumption advisories. (*Id.* at 10-13.)
23

1 As to Dr. Eaton, Ms. Hiltner opines that Dr. Eaton's use of Dr. Sunding's estimates of
2 LDW fish and shellfish consumption rates, and his own estimates of PCB fish and shellfish
3 tissue exposure point concentrations, derive an inappropriately low estimate of fish and shellfish
4 consumption and PCB intake. (DeBord Hiltner Decl., Ex. B at 13-14.) Ms. Hiltner opines that
5 the human health risk assessment conducted for the LDW ROD found much higher fish and
6 shellfish consumption rates and PCB intake in the LDW. (*Id.* at 14-16.)

7 III. DISCUSSION

8 A. Legal Standards

9 Federal Rule of Evidence 702 provides in relevant part:

10 A witness who is qualified as an expert by knowledge, skill, experience, training,
11 or education may testify in the form of an opinion or otherwise if: (a) the expert's
12 scientific, technical, or other specialized knowledge will help the trier of fact to
13 understand the evidence or to determine a fact in issue; (b) the testimony is based
on sufficient facts or data; (c) the testimony is the product of reliable principles and
methods; and (d) the expert has reliably applied the principles and methods to the
facts of the case.

14 Fed. R. Evid. 702. For expert testimony to be admissible under Rule 702, it must satisfy three
15 requirements: (1) the expert witness must be qualified; (2) the testimony must be reliable; and (3)
16 the testimony must be relevant. *See Daubert v. Merrell Dow Pharms., Inc.* ("Daubert I"), 509
17 U.S. 579, 589-91 (1993). The proponent of expert testimony has the burden of establishing that
18 the admissibility requirements are met by a preponderance of the evidence. *Id.* at 592 n.10; *see*
19 *also Lust v. Merrell Dow Pharms., Inc.*, 89 F.3d 594, 598 (9th Cir. 1996).

20 Before admitting expert testimony into evidence, the Court acts as a "gatekeeper" in
21 determining its admissibility under Rule 702 by ensuring the testimony is both "relevant" and
22 "reliable." *United States v. Ruvalcaba-Garcia*, 923 F.3d 1183, 1188 (9th Cir. 2019) (citing
23 *Daubert I*, 509 U.S. at 597). Expert testimony is relevant where "the evidence logically

1 advance[s] a material aspect of the party’s case.” *Estate of Barabin v. AstenJohnson, Inc.*, 740
2 F.3d 457, 463 (9th Cir. 2014) (internal quotations and citation omitted), *overruled on other*
3 *grounds by United States v. Bacon*, 979 F.3d 766 (9th Cir. 2020) (en banc). Testimony is reliable
4 where it has “a reliable basis in the knowledge and experience of the relevant discipline.” *Id.*
5 (quoting *Kumho Tire Co., Ltd. v. Carmichael*, 526 U.S. 137, 149 (1999)).

6 The Supreme Court has noted the reliability inquiry is a “flexible one,” and while the
7 Supreme Court has suggested several factors helpful in determining reliability, trial courts are
8 generally given “broad latitude in determining the appropriate form of the inquiry.”¹ *United*
9 *States v. Wells*, 879 F.3d 900, 934 (9th Cir. 2018) (quoting *Kumho Tire*, 526 U.S. at 150); *see*
10 *also Messick v. Novartis Pharm. Corp.*, 747 F.3d 1193, 1196 (9th Cir. 2014) (finding Rule 702
11 should be applied with a “liberal thrust” favoring admission) (quoting *Daubert I*, 509 U.S. at
12 588); *United States v. Hankey*, 203 F.3d 1160 (9th Cir. 2000) (Rule 702 is “construed liberally”
13 in considering admissibility of testimony based on specialized knowledge).

14 Furthermore, the reliability inquiry favors admission of testimony as “[s]haky but
15 admissible evidence is to be attacked by cross examination, contrary evidence, and attention to
16 the burden of proof, not exclusion.” *Primiano v. Cook*, 598 F.3d 558, 564 (9th Cir. 2010) (citing
17 *Daubert I*, 509 U.S. at 596). The reliability inquiry test does not seek to measure “the correctness
18 of the expert’s conclusions but the soundness of [his or her] methodology,” and therefore, when
19 an expert meets the standards established by Rule 702, “the expert may testify[,] and the fact
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22 ¹ In relevant part, *Daubert I* suggested several reliability factors a trial court may examine to determine
23 the reliability of expert testimony, including: (1) whether a theory or technique can be tested; (2) whether
it has been subjected to peer review and publication; (3) the known or potential error rate of the theory or
technique; (4) the existence and maintenance of standards and controls; and (5) whether the theory or
technique enjoys general acceptance within the relevant scientific community. *Daubert I*, 509 U.S. at
592-94; *see also Mukhtar v. California State Univ., Hayward*, 299 F.3d 1053, 1064 (9th Cir. 2002).

finder decides how much weight to give that testimony.” *Pyramid Techs., Inc. v. Hartford Cas. Ins. Co.*, 752 F.3d 807, 814 (9th Cir. 2014) (quoting *Primiano*, 598 F.3d at 564-65).

B. Dr. Sunding

The City moves to exclude Dr. Sunding’s initial expert report and to strike his supplemental report. (*See Sunding Mots.*) The City argues Dr. Sunding’s submission of a supplemental report was untimely as it was submitted six months after expert reports were due. (Pl.’s Sunding Strike Mot. at 1, 5.) The City further argues Dr. Sunding’s supplemental report goes beyond permitted supplementation allowed pursuant to Rule 26(e) to effectively adopt new methodologies for his prior opinions while also reinterpreting underlying data to arrive at his desired conclusion. (*Id.* at 1, 5-7.) As to his initial expert report, the City argues Dr. Sunding’s opinions lack sufficient data to express a reliable opinion based on its utilization of the Mayfield and Windward Studies and given the methods undertaken to arrive at his LDW angler population estimate and resident seafood consumption estimate. (Pl.’s Sunding Mot. at 4-12.)

Defendants counter that exclusion and striking of Dr. Sunding’s supplemental report is not warranted on this record.² Defendants argue Dr. Sunding’s supplemental report merely corrects his initial expert report as permitted by Rule 26(e). (Defs.’ Sunding Strike Mot. at 1, 3-6.) Defendants additionally contend the City cannot show it would be prejudiced by the

² Defendants additionally argue the City’s separate motion to strike Dr. Sunding’s supplemental expert report was filed as a workaround of this Court’s Local Civil Rule (“LCR”) 7(e)(4). (Defs.’ Sunding Strike Resp. at 1, 9.) By splitting its opposition to Dr. Sunding’s expert reports across two motions, Defendants argue the City seeks to evade the 12-page limit imposed on motions to exclude expert testimony, which Defendants argue is clear based on the City’s prior motions to exclude expert testimony that included motions to strike. (*Id.* at 9 (citing LCR 7(e)(4)).) Nonetheless, the Court will consider both of the City’s motions as the two, though related given the procedural posture of Dr. Sunding’s reports, are discretely aimed at excluding two separate reports on two different bases: (1) the untimeliness and inappropriateness of Dr. Sunding’s supplemental report under Rule 26(e); and (2) the underlying reliability of Dr. Sunding’s methodologies and opinions.

1 introduction of Dr. Sunding's supplemental report. (*Id.* at 1, 6-9.) As to the challenged bases for
2 his initial expert report, Defendants argue the City inappropriately frames its disagreements with
3 Dr. Sunding's conclusions as challenges to the reliability of his methodology. (Defs.' Sunding
4 Resp. at 1-2.)

5 Here, the Court finds a brief recitation of the background and interplay of Dr. Sunding's
6 expert report and supplemental expert report will benefit the Court's discussion of Dr. Sunding's
7 reports.

8 *i. Background*

9 On November 22, 2021, Defendants served Dr. Sunding's initial expert report on the
10 City. (First Gotto Decl., Ex. A at 1.) On April 27, 2022, the City conducted Dr. Sunding's first
11 deposition. (*See* Second Gotto Decl., Ex. C (dkt. # 618-3).)

12 At Dr. Sunding's first deposition, the City noted several errors with Dr. Sunding's angler
13 population estimate and his fish consumption estimate.³ With regard to angler population, the
14 City challenged Dr. Sunding's particular use of the Chao estimator due to incorrectly applied
15 inputs. (*See* Second Gotto Decl., Ex. C (Sunding Dep. at 182:18-188:11).) With the corrected
16 inputs, the City demonstrated that the correct estimate of 1997 LDW summer anglers was 522,
17 not Dr. Sunding's original estimate of 344. (*Id.* (Sunding Dep. at 187:9-25).) Regarding the
18 LDW resident seafood consumption rate, the City challenged that Dr. Sunding's equation

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³ The City notes that upon being presented with these deficiencies in his report at his first deposition, Dr. Sunding testified the text of his initial report was mistaken and that his calculations in fact considered the number of people sharing the meal in the numerator, not the denominator. (*See* Second Gotto Decl., Ex. C (Sunding Dep. at 158:16-165:25).) However, at his subsequent deposition, Dr. Sunding testified his fish consumption estimate equation accurately described his fish consumption calculations reflected in his initial report. (*See* Second Gotto Decl., Ex. D (Second Sunding Dep. (dkt. # 618-4) at 295:10-14).) Likewise, with respect to his angler population estimate, Dr. Sunding testified he could not remember the logic behind his application of the Chao estimator. (*See* Second Gotto Decl., Ex. C (Sunding Dep. at 182:18-188:11).)

1 underestimated LDW resident seafood consumption. Particularly, the City noted the portion size
2 in the numerator of his equation did not vary based on the number of people sharing the meal,
3 such that a single person or a large family were both considered to have consumed the same
4 amount of food. (*See* Second Gotto Decl., Ex. C (Sunding Dep. at 158:16-165:25).)

5 On May 31, 2022, Defendants informed the City that Dr. Sunding would issue a
6 supplemental report, which the City objected to as untimely. (*See* Second Gotto Decl., Exs. E
7 (dkt. # 618-5), F (dkt. # 618-6).) On June 1, 2022, Defendants served Dr. Sunding's
8 supplemental report on the City. (*See* First Gotto Decl., Ex. C.) As previously detailed above, Dr.
9 Sunding's supplemental report recalculated his 1997 angler population estimate, reinterpreted a
10 1997 angler survey card, and revised his equation for LDW resident seafood consumption. (*Id.*)

11 Due to the late submission of Dr. Sunding's supplemental expert report, the parties
12 agreed to reopen limited expert discovery with respect to Dr. Sunding and to allow for a second
13 deposition on the areas explored in his supplemental report. (Dkt. ## 255-56.) On July 15, 2022,
14 Dr. Sunding's second deposition was conducted. (*See* Second Gotto Decl., Ex. D (Second
15 Sunding Dep. (dkt. # 618-4) at 295:10-14).)

16 *ii. Supplemental Expert Report*

17 To begin, Federal Rule of Civil Procedure 26(a)(2)(B)(i) provides that a written expert
18 report must contain "a complete statement of all opinions the witness will express and the basis
19 and reasons for them." An expert witness has a duty to supplement his or her report "in a timely
20 manner if the party learns that in some material respect the disclosure or response is incomplete
21 or incorrect, and if the additional or corrective information has not otherwise been made known
22 to the other parties during the discovery process or in writing." Fed. R. Civ. P. 26(e)(1)(A).
23 When a party fails to comply with Rule 26, the sanction of exclusion is automatic and mandatory

1 unless the sanctioned party can show that its violation was either substantially justified or
2 harmless. *See* Fed. R. Civ. P. 37(c)(1).

3 Supplemental expert reports that merely attempt “to deepen and strengthen the expert’s
4 prior reports” do not fall within the permissible scope of supplemental expert disclosures
5 under Rule 26(e). *Lindner v. Meadow Gold Dairies, Inc.*, 249 F.R.D. 625, 639 (D. Haw.
6 2008) (citation omitted). Rule 26(e) “permits supplemental reports only for the narrow purpose
7 of correcting inaccuracies or adding information that was not available at the time of the initial
8 report.” *Minebea Co., Ltd. v. Papst*, 231 F.R.D. 3, 6 (D.D.C. 2005) (citation omitted); *see also*
9 *Lo v. United States*, 2021 WL 5121745, at *2 (W.D. Wash. Nov. 3, 2021) (“The rule for
10 supplementation does not give license to sandbag one’s opponent with claims and issues which
11 should have been included in the original witness report.” (citation and internal quotations
12 omitted)). To otherwise allow the submission of supplemental reports outside of their
13 permissible scope:

14 [W]ould create a system where preliminary reports could be followed by
15 supplementary reports and there would be no finality to expert reports, as each side,
16 in order to buttress its case or position, could “supplement” existing reports and
17 modify opinions previously given. This practice would surely circumvent the full
18 disclosure requirement implicit in Rule 26 and would interfere with the Court’s
ability to set case management deadlines, because new reports and opinions would
warrant further consultation with one’s own expert and virtually require new rounds
of depositions. That process would hinder rather than facilitate settlement and the
final disposition of the case.

19 *Lindner*, 249 F.R.D. at 639-40 (citing *Beller ex rel. Beller v. United States*, 221 F.R.D. 689, 695
20 (D.N.M. 2003)).

21 Here, Dr. Sunding’s supplemental submission essentially concedes that he misapplied the
22 population estimation technique he employed for LDW anglers, that he utilized an erroneous fish
23 consumption formula, and that he misinterpreted an angler survey card in his initial report. (*See*

1 First Gotto Decl., Ex. C at 1-2.) Such changes are not proper bases to issue a supplemental expert
2 report. Rule 26(e) does not “create a loophole through which a party . . . who wishes to revise
3 [his] disclosures in light of [his] opponent’s challenges to the analysis and conclusions therein,
4 can add to them to [his] advantage after the court’s deadline for doing so has passed.” *Lo*, 2021
5 WL 5121745 at *2 (citing *Luke v. Fam. Care & Urgent Med. Clinics*, 323 F. App’x 496, 500
6 (9th Cir. 2009)).

7 The record is clear that Dr. Sunding’s supplemental report was issued nearly six months
8 after the expert report deadline of November 2021 (dkt. # 222), and on the last day of the parties’
9 expert discovery period (dkt. # 229). Pertinently, the supplemental report was issued only after
10 the City conducted a deposition that identified deficiencies in his initial expert report. Defendants
11 do not dispute that Dr. Sunding was in possession of all the information he used for his
12 supplemental report at the time he issued his initial expert report. Nor did Defendants seek leave
13 of this Court to extend the expert report deadline to issue his supplemental report.

14 Like the situations previously presented to this Court with the City’s untimely submission
15 of supplements from Dr. Mark Velleux and Dr. Michael Trapp (*see* dkt. ## 761 at 12-15, 772 at
16 17-19) after the expiration of the expert report and discovery deadlines, Defendants’ submission
17 of Dr. Sunding’s supplemental report here “is in all practical effect a supplemental expert report
18 aimed at remedying the deficiencies in [his] report” and therefore “little more than a back-door
19 effort around the Court’s discovery deadlines.” *See Bell v. Boeing Co.*, 2022 WL 1206728, at *3
20 (W.D. Wash. Apr. 22, 2022) (citing *Eno v. Forest River Inc.*, 2021 WL 6428636, at *2 (W.D.
21 Wash. July 1, 2021) (finding expert declaration submitted after expert report deadline, and in
22 response to motion to exclude, untimely and that it “d[id] not excuse Plaintiff’s non-compliance
23 with Rule 26(a)”). Accordingly, the Court finds Dr. Sunding’s supplemental expert report does

1 not comply with Rule 26(e). *See Moussouris v. Microsoft Corp.*, 311 F. Supp. 3d 1223, 1239
2 (W.D. Wash. 2018) (citation omitted) (“Rule 26(e) should only apply when the party correct[s]
3 an inaccuracy or fill[s] in a gap based on information previously unavailable.”).

4 If a supplemental expert report is untimely, it must be excluded under Fed. R. Civ. P.
5 37(c)(1) unless the failure to timely supplement “was substantially justified or is harmless.”
6 *Silvia v. MCI Commc’n. Servs.*, 787 F. App’x 399, 400 (9th Cir. 2019) (citation omitted). The
7 burden falls on the party facing exclusion to demonstrate that their failure to disclose was either
8 substantially justified or harmless. *W. Towboat Co. v. Vigor Marine, LLC*, 2021 WL 2156694, at
9 *1 (W.D. Wash. May 27, 2021) (citing *Holen v. Jozic*, 2018 WL 5761775, at *2 (W.D. Wash.
10 Nov. 2, 2018)). “District courts are given ‘particularly wide latitude’ in determining whether to
11 issue sanctions, including the exclusion of evidence, under Rule 37(c)(1).” *Id.* (quoting *Bess v.*
12 *Cate*, 422 F. App’x 569, 571 (9th Cir. 2011)).

13 Defendants argue that exclusion of Dr. Sunding’s supplemental report pursuant to Rule
14 37(c)(1) is an unduly harsh remedy. (Defs.’ Sunding Strike Resp. at 7-8.) Defendants argue any
15 prejudice resulting from the late submission of Dr. Sunding’s supplemental report has already
16 been cured, that its introduction will not disrupt trial, and that Defendants notified the City in
17 good faith immediately about its intentions to submit the supplemental report to allow the City to
18 conduct additional discovery. (*Id.*) The City counters exclusion remains warranted because Dr.
19 Sunding’s untimely efforts to correct errors in calculation and methodology have caused the City
20 “to devote substantial time and resources to the continuing evaluation and discovery of Dr.
21 Sunding’s opinions long past the June 1 expert discovery cutoff set by the [C]ourt.” (Pl.’s
22 Sunding Strike Reply at 8.)
23

1 Here, the Court finds exclusion of Dr. Sunding's supplemental report appropriate.
2 Defendant's late disclosure of Dr. Sunding's supplemental report was not substantially justified
3 nor harmless. Dr. Sunding inappropriately sought to rehabilitate previous methodologies to
4 arrive back at his prior conclusions that LDW angling population and resident seafood
5 consumption rates remained unaffected by LDW fish consumption advisories despite his
6 adjustments to his report.

7 For example, because the City had identified Dr. Sunding's 1997 LDW angler population
8 estimate of 344 was actually 522 at his deposition (Second Gotto Decl., Ex. C (Sunding Dep. at
9 182:18-188:11)), and therefore that his 2015 LDW angler "but-for" population estimate level
10 was actually 377 (First Gotto Decl., Ex. C at 6), Dr. Sunding's supplemental report shifted
11 methodologies by comparing the 377 "but-for" population estimate to a 95% confidence interval
12 of 152-406 that he constructed around the 2015 population estimate of 254.⁴ (*See id.* at 4, 6.) As
13 a result, rather than comparing the 2015 "but-for" estimate to his 2015 actual estimate as he had
14 done in his initial expert report (First Gotto Decl., Ex. A at 23 ("Because the but-for angler
15 population is slightly *lower* than the actual angler population, I do not find evidence that fish
16 consumption advisories reduced the LDW resident species angling population.")), Dr. Sunding
17 pivoted to referencing his confidence interval to continue to express his original opinion (First
18 Gotto Decl., Ex. C at 4 ("Because the but-for angler population is *within the confidence interval*
19 *of* the actual angler population, I do not find evidence that fish consumption advisories reduced
20 the LDW resident species angling population") (emphasis added).)

21
22 ⁴ Defendants argue the 95% confidence interval used in Dr. Sunding's supplemental report was
23 previously calculated in his initial report. (Defs.' Sunding Strike Resp. at 5 (citing First Gotto Decl., Ex.
A at 24).) Though a confidence interval was provided in Dr. Sunding's initial report, his prior opinion did
not rely on it for his LDW angler population opinion until the revision of his population estimate of 1997
LDW anglers. (*Compare* First Gotto Decl., Ex. A at 23-24 *with* First Gotto Decl., Ex. C at 4.)

1 As detailed, Defendants also provided Dr. Sunding's supplemental expert report to the
2 City six months after the issuance of his initial expert report, a month after his deposition, and on
3 the eve of the close of expert discovery. Though the parties stipulated to extend expert discovery
4 with regard to Dr. Sunding and to reopen his deposition (*see* dkt. # 255 at 2), the City was
5 ultimately drawn into a prolonged quagmire with respect to Dr. Sunding's reports long after the
6 expert report deadline. This did not conclude until July 15, 2022, approximately three weeks
7 prior to the Court's *Daubert* and dispositive motions deadline. That predicament came about
8 because of the improper supplementation of Dr. Sunding's initial expert report.

9 For the reasons set forth above, Dr. Sunding's supplemental report is stricken.

10 *iii. Expert Report*

11 As noted above, Dr. Sunding's original report is riddled with deficiencies such that after
12 the conclusion of his first deposition, he issued a supplemental report to rehabilitate his opinions
13 with respect to both LDW angler population and LDW resident seafood consumption. Because
14 Dr. Sunding's supplemental report is untimely, and not an appropriate supplement under Rule
15 26(e), Dr. Sunding's deficient original report must correspondingly be excluded.

16 In any case, Dr. Sunding's opinions are also founded on unreliable data. With respect to
17 his LDW angler population estimate, Dr. Sunding's estimate relied on both the Mayfield Study
18 (First Gotto Decl., Ex. D (dkt. # 616-4)) and the Windward Study (First Gotto Decl., Ex. D (dkt.
19 # 616-5)). But as this Court previously noted with respect to Defendants' expert Dr. William
20 Desvousges (*see* dkt. # 777 at 13, 15, 17-18), the Windward Study (or "Fisher Study" as
21 previously referenced) advised against its use quantitatively to estimate the number of LDW
22 anglers. The Windward Study provides that it:

23 [W]as not designed to quantify the overall number of fishers using the LDW nor
the number of fishers targeting resident versus non-resident fish. The study was

1 dependent on self-reported fishing patterns (i.e., the surveyor did not note or count
2 fish and shellfish in fisher catch bucket) on specific days and at specific locations
and times-of-day throughout a 1-year period.

3 (First Gotto Decl., Ex. E at ES-2 n.1.) Because it “was not designed to estimate the total number
4 of fishers on the [LDW],” in its explicit study limitations, it notes “it is not possible to know how
5 accurately the sample of the population that was surveyed represents the whole [LDW] fisher
6 population.” (*Id.* at 78.) Dr. Sunding’s reliance on the Windward Study for his opinions in such a
7 quantitative fashion to opine on the number of LDW anglers is therefore inappropriate.⁵

8 Furthermore, the City also credibly points to issues with Dr. Sunding’s use of the
9 Mayfield Study for his LDW resident seafood consumption opinion given Dr. Sunding’s
10 extrapolation of data from a 10-week period in the summer of 1997 to an annual population
11 comparison. (*See* Pl.’s Sunding Mot. at 4-6.) Dr. Sunding’s report assumed “that the species
12 anglers catch on the survey day (by the time of the survey) are representative of what they catch
13 and consume over the year and that reported meals can be divided equally among species
14 caught.” (First Gotto Decl., Ex. A at 27-28.) But Dr. Sunding’s report provides no basis for a
15 10-week snapshot of 1997 LDW summer anglers as being appropriately representative of annual
16 consumption patterns, and not just that 10-week period captured by the Mayfield Study
17 interviewees. In short, Dr. Sunding’s reliance on the Mayfield Study does not provide a reliable
18 basis to estimate a year-round angling population nor LDW resident seafood consumption rates.

19 Because the Court will exclude Dr. Sunding’s opinion based on the previously identified
20 deficiencies from his supplemental report, and due to his unreliable dependence on the

21
22 ⁵ At oral argument, Defendants contended Dr. Desvousges’ use of the Windward Study and Dr. Sunding’s
23 use differed in that Dr. Sunding examined the underlying survey data taken from the Windward Study to
conduct his angler population estimate through the Chao estimator. (*See* dkt. # 785.) The Court fails to see
how the itemized examination of underlying survey data from the Windward Study is not an
impermissible use of the study for a quantitative purpose, especially if the survey collection itself was not
intended to be conducted for quantitative purposes.

1 Windward Study and Mayfield Study, the Court need not determine whether the remainder of
2 Dr. Sunding's challenged methods to arrive at his estimates, *i.e.*, his use of avidity bias (fishing
3 frequency) and the Chao estimator, were also unreliable. Dr. Sunding's opinions are therefore
4 excluded.

5 **C. Dr. Eaton**

6 Next, the City moves to exclude certain portions of Dr. Eaton's expert report, and the
7 entirety of his supplemental report, on the basis that his testimony and opinions at issue are based
8 on unreliable methodology and data from Dr. Sunding. (Pl.'s Eaton Mot. at 1.) Specifically, the
9 City moves to exclude Dr. Eaton's first major opinion that "levels of PCBs measured in edible
10 seafood in the LDW do not make them unsafe for human consumption" and "all supporting
11 testimony and discussion."⁶ (*Id.*) The City additionally moves to exclude Dr. Eaton's
12 supplemental report as untimely because it was submitted after the close of expert discovery.
13 (*Id.*)

14 Defendants respond that Dr. Eaton's reliance on Dr. Sunding's revised fish consumption
15 estimates remain proper because they are sufficiently reliable. (Defs.' Eaton Resp. at 2-3.)
16 Defendants additionally argue that striking Dr. Eaton's supplemental report is not appropriate
17 because the City has not been prejudiced, and to any extent that the City has been prejudiced,
18 additional discovery could be authorized to remedy such prejudice. (*Id.* at 8-9.)

19 Here, Dr. Eaton's supplemental report is even more untimely than Dr. Sunding's
20 submission. Defendants provided Dr. Eaton's supplemental expert report to the City on July 8,
21 2022, over a month after expert discovery expired in this case. (*See* Wagner Eaton Decl. at ¶ 4;

22
23 ⁶ The City identifies this testimony and "all supporting testimony and discussion" to be: (1) Section I.B(1); (2) Section I.C; (3) Section II; (4) Appendices 2 through 6; and (5) Attachments 3 through 5. (*See* Wagner Eaton Decl. Ex. A at 3-4, 7-80, 163-331, 412-95.)

1 Wagner Eaton Decl., Ex. C (dkt. # 620-3) at 1.) Dr. Eaton’s supplemental report was prepared
2 “in response to the revised Lower Duwamish Waterway fish consumption rates presented in the
3 June 1, 2022, supplemental report of Dr. David Sunding.” (Wagner Eaton Decl., Ex. C at 1.)
4 Though the parties were able to agree to an extension of the expert discovery deadlines and
5 reopening of Dr. Sunding’s deposition after his revised estimates (*see* dkt. # 256), the City was
6 not provided a similar opportunity to conduct any further expert discovery or an additional
7 deposition with respect to Dr. Eaton.

8 Defendants have also failed to argue or make any demonstration that its submission of
9 Dr. Eaton’s supplemental report after the conclusion of expert discovery was substantially
10 justified or harmless. *See* Fed. R. Civ. P. 37(c)(1). The City was prejudiced due to the late
11 provision of Dr. Eaton’s supplemental report and because there was no extended expert
12 discovery period authorized with respect to Dr. Eaton. At this late stage in this litigation,
13 authorizing any further discovery would further prejudice the City given the expert discovery
14 period in this case has long expired and the need to move this case forward. Furthermore, Dr.
15 Eaton’s supplemental report relied on Dr. Sunding’s supplemental report, which as considered
16 above, impermissibly adopted new methodologies to salvage his original opinions and has been
17 stricken. Consequently, Dr. Eaton’s supplemental report will also be stricken.

18 Because Dr. Eaton’s first major opinion that “levels of PCBs measured in edible seafood
19 in the LDW do not make them unsafe for human consumption” relies extensively on Dr.
20 Sunding’s erroneous fish consumption estimates, the Court will similarly exclude portions of Dr.
21 Eaton’s expert testimony which rely on Dr. Sunding’s fish consumption estimates. Accordingly,
22 the City’s Eaton Motion is granted.
23

D. Dr. DeGrandchamp

Next, Defendants move to exclude Dr. DeGrandchamp from testifying due to his opinion finding that if Monsanto had conducted a chronic study of PCBs between the 1930s and 1960s, PCBs would have been determined to be carcinogenic much earlier in time.⁷ (Defs.’ DeGrandchamp Mot. at 1.) Defendants contend Dr. DeGrandchamp is unqualified to testify regarding what historical cancer testing on PCBs would have revealed and that any such opinion would be “grossly speculative” and irrelevant. (*Id.* at 2-6.) The City responds that Dr. DeGrandchamp is sufficiently qualified to testify on historical cancer testing, that Monsanto similarly offers a competing opinion from an expert about what animal cancer testing on PCBs would have shown in the 1930s through 1960s, and that this opinion is not speculative, irrelevant, and/or unduly prejudicial.⁸ (Pl.’s DeGrandchamp Resp. at 1-2.)

As initial matters, the Court notes Defendants cite to the entire “Summary of Opinions” from “Book One” of Dr. DeGrandchamp’s Report, which contains 26 distinct paragraphs offering opinions, the majority of which do not discuss or consist of Dr. DeGrandchamp’s opinion regarding what historical cancer testing of PCBs would have shown. (*See* DeBord DeGrandchamp Decl., Ex. A at 28-35.) The Court observes only portions of paragraphs 12 and 26 in Dr. DeGrandchamp’s summary of opinions address Defendants’ challenged portions of his

⁷ Defendants also seek to exclude Dr. DeGrandchamp’s opinions “regarding alleged ecological harm or alleged human health effects from environmental levels of PCBs in Seattle.” (Defs.’ DeGrandchamp Mot. at 6-7.) Curiously, Defendants note Dr. DeGrandchamp confirmed at his deposition that he does not intend to offer any Seattle-specific opinions regarding alleged ecological harm or human health effects. (*Id.* at 7 (citing DeBord DeGrandchamp Decl., Ex. B (DeGrandchamp Seattle Dep. (dkt. # 631-2) at 55:8-56:7)).) The City also confirms in its response that none of these opinions will be offered at trial. (*See* Pl.’s DeGrandchamp Resp. at 10.)

⁸ The City further notes that though Defendants challenged the entirety of Dr. DeGrandchamp’s testimony, the substance of Defendants’ DeGrandchamp Motion is concentrated on only a small portion of the several opinions Dr. DeGrandchamp provided in his report. (Pl.’s DeGrandchamp Resp. at 1 n.2; *see also* DeBord DeGrandchamp Decl., Ex. A at 30-31, 35.)

1 expert report. (*See id.* at 30-31, 35.) In addition, on reply, Defendants argue Dr.
2 DeGrandchamp’s opinion is unreliable. (Defs.’ DeGrandchamp Reply at 2-4.) The Court need
3 not consider this basis for exclusion of Dr. DeGrandchamp’s opinion because Defendants failed
4 to argue it in their initial Motion. *See Turtle Island Restoration Network v. U.S. Dep’t of Com.*,
5 672 F.3d 1160, 1166 n.8 (9th Cir. 2012) (finding “arguments raised for the first time in a reply
6 brief are waived”); *Zamani v. Carnes*, 491 F.3d 990, 997 (9th Cir. 2007) (“The district court
7 need not consider arguments raised for the first time in a reply brief.”).

8 As to Defendants’ qualification challenge, an expert is considered qualified to testify if
9 the expert has “sufficient specialized knowledge to assist the jurors in deciding the particular
10 issues in the case.” *Kumho Tire*, 526 U.S. at 156. Because Rule 702 “contemplates a *broad*
11 *conception* of expert qualifications,” only a “*minimal foundation* of knowledge, skill, and
12 experience” is required. *Hangarter v. Provident Life & Accident Ins. Co.*, 373 F.3d 998, 1015-16
13 (9th Cir. 2004) (internal quotations and citation omitted; emphasis in original).

14 Here, Dr. DeGrandchamp is sufficiently qualified to testify in this matter as to his
15 historical cancer testing opinion. Dr. DeGrandchamp has worked as a professor of toxicology for
16 over three decades and regularly served as an expert witness in PCB cases against Monsanto. In
17 fact, Dr. DeGrandchamp has previously testified to his challenged opinion against Defendants in
18 another PCB case involving Defendants, and there is no evidence in the record that such opinion
19 was previously excluded. (*See* DeBord DeGrandchamp Decl., Ex. A at 471; *see also, e.g., id.*,
20 Ex. E (dkt. # 631-5) at 5.) Moreover, despite Defendants’ challenge that Dr. DeGrandchamp
21 remains unqualified based on an alleged lack of awareness of industry standards regarding
22 cancer testing in the 1930s to 1960s, Dr. DeGrandchamp’s report details standards and protocols
23 in place during the relevant period. (*See id.*, Ex. A at 29-30; *see also id.* at 74-96.) This includes

1 three FDA publications released between 1943 and 1955 detailing “toxicity testing guidance . . .
2 that standardized the field” of industrial toxicity testing. (*See id.* at 29-30.)

3 Ninth Circuit case law is also clear that an expert may “address a hypothetical world that
4 never existed.” *Elosu v. Middlefork Ranch Inc.*, 26 F.4th 1017, 1025 (9th Cir. 2022) (quoting
5 *Alaska Rent-A-Car, Inc. v. Avis Budget Grp., Inc.*, 709 F.3d 872, 969 (9th Cir. 2013)). As such,
6 Dr. DeGrandchamp may appropriately consider counterfactual hypotheticals where the risks of
7 PCBs were known earlier in time due to animal cancer testing. *See also* Fed. R. Evid. 702
8 Advisory Committee’s Note to 2000 Amendments (noting that an expert can “rely on
9 hypothetical facts that are supported by the evidence.”). Similarly, Defendants provide an
10 unchallenged opinion from Dr. Eaton who opines in contrast that such animal cancer testing
11 would not have revealed PCBs to be carcinogenic (Wagner DeGrandchamp Decl., Ex. A (dkt.
12 # 655-1) at 6, 81-109). *See City of Pomona v. SQM N. Am. Corp.*, 750 F.3d 1036, 1049 (9th Cir.
13 2014) (“Where two credible experts disagree, it is the job of the fact finder, not the trial court, to
14 determine which source is more credible and reliable.”).

15 Finally, the Court finds Dr. DeGrandchamp’s opinion that human cancer risk from PCBs
16 was foreseeable, and thus avoidable, as early as the 1940s is sufficiently relevant in assessing the
17 reasonableness of Monsanto’s conduct for the City’s public nuisance claim. *See Alaska*
18 *Rent-A-Car, Inc.*, 709 F.3d at 883 (“The district court is not tasked with deciding whether the
19 expert is right or wrong, just whether his testimony has substance such that it would be helpful to
20 a jury.”). As to the remainder of Defendants’ challenges that certain of Dr. DeGrandchamp’s
21 opinions lack foundational support or relevant consideration of countervailing facts, such matters
22 are appropriate considerations for cross-examination, and not admissibility. *See Elosu*, 26 F.4th
23

1 at 1025 (citing *Alaska Rent-A-Car*, 738 F.3d at 969-70). Accordingly, Defendants’
2 DeGrandchamp Motion is denied.

3 **E. Ms. Hiltner**

4 Finally, Defendants move to exclude certain expert opinions of Ms. Hiltner contained in
5 her initial expert report and her rebuttal report. (Defs.’ Hiltner Mot. at 1-2.) Defendants argue
6 certain opinions in Ms. Hiltner’s initial expert report should be excluded because, though she
7 relies on documents that make up the EPA’s ROD and investigation for the LDW, Ms. Hiltner
8 diverged from EPA methodology and conclusions without articulating a basis for doing so. (*Id.*
9 at 1, 7-12.) Defendants further challenge that Ms. Hiltner is not qualified to offer rebuttal
10 opinions as to several of Defendants’ experts because Ms. Hiltner lacks the relevant specialized
11 knowledge such that her opinions constitute “lay speculation on matters that require technical
12 expertise.” (*Id.* at 3 (citing *People v. Kinder Morgan Energy Partners, L.P.*, 159 F. Supp. 3d
13 1182, 1190 (S.D. Cal. 2016)).)

14 The City responds that Ms. Hiltner’s opinions in her initial expert report are in
15 accordance with the EPA’s determination that PCBs are the main source of human health risk in
16 the LDW. (Pl.’s Hiltner Resp. at 1, 3-6.) The City argues Ms. Hiltner is also qualified to offer her
17 challenged rebuttal opinions because, rather than substantively offer opinions in Defendants’
18 experts’ fields, she opines assumptions underlying Defendants’ expert’s opinions are not in
19 accord with EPA rules and regulations and/or Washington state law. (*Id.* at 2, 6-12.)

20 The Court will examine Defendants’ contentions in turn:

21 *i. Expert Opinions*

22 Defendants challenge three opinions provided by Ms. Hiltner in her initial expert report:
23 (1) that PCBs were the “principal factor” in the EPA’s decision to list the LDW on the NPL in

1 2001; (2) that PCBs are the “primary driver” of the human health risk based upon her review of
2 documents that formed the EPA investigation and development of the ROD; and (3) that
3 “controlling ongoing sources of PCBs to the LDW is critical” to prevent recontamination of the
4 LDW. (*See* Defs’ Hiltner Mot. (citing DeBord Hiltner Decl., Ex. A at 1, 7-9, 14).)

5 As to her first two challenged opinions, Defendants argue that Ms. Hiltner’s opinions do
6 not stem from her review of the EPA documents at issue and ignore that the EPA uses an
7 objective scoring criterion, a Hazard Ranking Score (“HRS”) for every potential NPL site to
8 determine if a particular site is eligible for listing. (Defs.’ Hiltner Mot. at 8-9.) Defendants argue
9 Ms. Hiltner’s opinion systematically ignored other contaminants of concern detected in sediment
10 sampling that were detected in greater frequency than PCBs. (*Id.* at 9-10.) Defendants further
11 contend that the EPA’s Responsiveness Summary, as part of its publishing of the ROD, rejected
12 language that identified PCBs as the “primary risk driver” for the LDW cleanup. (*Id.* at 10-12.)

13 The City responds that Defendants’ focus on HRS ignores the EPA’s investigatory
14 history regarding the LDW, its listing as a Superfund Site, and the role of PCBs. (Pl.’s Hiltner
15 Resp. at 2-4.) The City argues that HRS is a tool for determining listing, but not “the primary
16 tool” that EPA considers in its listing decisions. (*Id.* at 3-4 (citing Hiltner Decl., Ex. B (Hiltner
17 Dep. (dkt. # 665-2) at 79:11-21)).) The City further responds that Ms. Hiltner’s opinion that
18 PCBs are the primary driver for human health risk in the LDW, and opinion regarding the need
19 to control ongoing sources of PCBs, are both sufficiently reliable given her cited aspects of the
20 ROD and role as the remedial project manager overseeing the ROD and remedial investigation.
21 (*Id.* at 4-6.)

22 Here, Ms. Hiltner permissibly opines on the role of PCBs in the remedial actions in the
23 LDW based on the EPA’s investigation and the 2014 ROD. Based on the Court’s review of Ms.

1 Hiltner's opinions, Ms. Hiltner draws upon her experience and expertise in examining EPA
2 documents and consulting on Superfund Sites to opine PCBs were a "principal factor" in the
3 EPA's decision to list the LDW as a Superfund Site. In her report, Ms. Hiltner cites to historical
4 documents indicating that in the nascent stages of the LDW investigation, the National Oceanic
5 and Atmospheric Association ("NOAA") had cited concerns with the EPA's investigations at the
6 Boeing Plant 2 facility, which "documented significant PCB releases to the LDW" and a King
7 County Department of Natural Resources study that found PCBs had accumulated in significant
8 quantities in LDW sediments. (DeBord Hiltner Decl., Ex. A at 4.) She notes that NOAA was
9 concerned about the harmful effects of PCBs in the Duwamish River sediments on juvenile
10 chinook salmon, which had been proposed for listing under the Endangered Species Act. (*Id.*)

11 Based on NOAA's request, Ms. Hiltner notes that the EPA agreed to evaluate under its
12 Site Assessment program to determine if the LDW should be listed as a Superfund Site. (DeBord
13 Hiltner Decl., Ex. A at 4.) The EPA conducted its initial site inspection of the LDW in 1999,
14 which "included collection of 312 surface sediment samples and 35 subsurface sediment samples
15 analyzed for PCBs and other contaminants." (*Id.*) That analysis found that PCBs were detected in
16 91% of the surface samples analyzed for PCBs. (*Id.*) Given this record, the Court finds that Ms.
17 Hiltner's opinion that PCBs served as a primary factor for the listing of the LDW as a Superfund
18 Site is sufficiently reliable and supported.

19 Next, Defendants claim that the EPA rejected Ms. Hiltner's opinion that PCBs are the
20 primary risk driver of the cleanup actions undertaken with respect to the LDW because the
21 EPA's responsiveness summary explicitly rejected a comment suggesting as much. (*See* Defs.'
22 Hiltner Mot. at 10-12 (citing DeBord Hiltner Decl., Ex. J (dkt. # 637-10) at 125-26).) However,
23 Ms. Hiltner's focus on PCBs for her analysis is not divergent from the EPA's own undertaking

1 with respect to the ROD and the LDW. As the City notes, and as previously examined by this
2 Court with respect to Defendants' challenges to Plaintiff's expert Dr. Mark Velleux (dkt. # 772
3 at 21-22), the EPA revised the ROD with an Explanation of Significant Differences in 2021 to
4 explicitly find "PCBs are the main source of risk to people's health from the [LDW] Superfund
5 site" after cPAHS were determined to be less carcinogenic than previously found. (*See* Woerner
6 Omnibus Decl., Ex. C (dkt. # 623-3) at 2.)

7 Last, Ms. Hiltner's opinion that "controlling ongoing sources of PCBs to the LDW is
8 critical" to prevent recontamination is sufficiently reliable. Though Ms. Hiltner did not
9 independently conduct any analysis or review of "ongoing" source control activities, Ms. Hiltner
10 appropriately cites to the ROD that implementation of the LDW cleanup plan contemplated a
11 comprehensive source control program was necessary to prevent or minimize recontamination.
12 (*See* DeBord Hiltner Decl., Ex. A at 14.) Given her role in the development of the ROD, Ms.
13 Hiltner is well-qualified to explain the EPA's requirement that ongoing sources of contaminants
14 be controlled. *See Kennedy v. Collagen Corp.*, 161 F.3d 1226, 1230-31 (9th Cir. 1998) (citation
15 omitted) ("Disputes as to the strength of [an expert's] credentials, faults in his use of [a
16 particular] methodology, or lack of textual authority for his opinion, go to the weight, not the
17 admissibility, of [his] testimony").

18 Defendants' criticisms for how Ms. Hiltner arrived at her understanding of the historical
19 EPA documents and the ROD to set forth her opinion that PCBs are the primary contributor to
20 the LDW's contamination ultimately goes to the weight, and not the admissibility, of her
21 testimony. *See Primiano*, 598 F.3d at 564 (citing *Daubert I*, 509 U.S. at 596); *Sanft*, 2021 WL
22 5278766 at *2. Defendants may make such challenges during cross-examination.

1 ii. *Rebuttal Opinions*

2 First, with respect to Ms. Hiltner's rebuttal opinions that Dr. Sunding uses inappropriate
3 studies and faulty assumptions to "derive extremely low estimates of LDW fish and shellfish
4 consumption rates" (DeBord Hiltner Decl., Ex. B at 9), and that Dr. Eaton derived
5 "inappropriately low estimates of fish and shellfish consumption and PCB intake" (*id.* at 13-14),
6 Ms. Hiltner's rebuttal opinions will not be necessary at trial because of the Court's above
7 exclusion of Dr. Sunding and Dr. Eaton's opinions on both regards.

8 Next, with respect to Ms. Hiltner's rebuttal opinions concerning Dr. Boehm's opinions
9 and Dr. Kavanaugh's opinions, the Court agrees Ms. Hiltner is not qualified to offer expert
10 opinions on the methodology underlying either expert's analysis. Ms. Hiltner's rebuttal opinions,
11 which are centered on EPA regulatory rules and policy, are generally irrelevant to the claims and
12 defenses asserted in this action concerning the City's public nuisance claim and will only serve
13 to confuse the jury regarding the standards applicable to the scientific disciplines of Defendants'
14 experts.

15 With respect to Dr. Boehm, Ms. Hiltner's rebuttal opinion provides that Dr. Boehm's
16 Opinions 3 and 4 focused on the ecological health of the LDW, "including risks to the health of
17 fish, piscivorous (fish-eating) wildlife, and benthic invertebrates (bottom-dwelling organisms)
18 from contamination in the LDW."⁹ (DeBord Hiltner Decl., Ex. B at 1.) To that end, Defendants
19 represent Dr. Boehm's work in this case required him to conduct an ecological risk assessment,
20 based on concentrations of PCBs found in the LDW, to arrive at his opinions that current PCB

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23 ⁹ Though Defendants submitted a copy of Dr. Boehm's CV as representative of his environmental and
ecological risk assessment background, neither party provided the Court with Dr. Boehm's full report
absent the excerpted portions in Ms. Hiltner's rebuttal report.

1 levels in fish are below concentrations associated with adverse effects. (*See* Defs.’ Hiltner Mot.
2 at 5 (citing DeBord Decl., Ex. F (dkt. # 637-6)).)

3 On this issue, Ms. Hiltner’s EPA experience lacks the minimal foundation of knowledge,
4 skill, and experience to qualify her to identify flaws in Dr. Boehm’s ecological risk assessment
5 methodology. Because of her lack of experience, her rebuttal opinion cites repeatedly to the
6 human health risk assessment conducted for the ROD by other EPA employees, including to
7 aspects such as the risks of PCB bioaccumulation in the food chain (*see* DeBord Hiltner Decl.,
8 Ex. B at 2 n.3), which is not sufficient to qualify her to rebut Dr. Boehm’s opinions. *See Fontana*
9 *v. City of Fed. Way*, 2014 WL 202104, at *6 (W.D. Wash. Jan. 17, 2014) (“An expert in one field
10 cannot express an opinion relying on data that requires expertise in another field.”); *see also*
11 *Woods v. City of Hayward*, 2021 WL 4061657, at *19 (N.D. Cal. Sep. 7, 2021) (“A testifying
12 expert may rely on the opinions of non-testifying experts as a foundation for the opinions within
13 the testifying expert’s field of expertise. Rule 703, however, is not a license for an expert to
14 simply parrot the opinions of non-testifying experts.”). It is otherwise unclear from her rebuttal
15 report how her EPA experience allows her to identify the alleged errors in Dr. Boehm’s risk
16 assessment.

17 Despite the City’s contention that Ms. Hiltner is “not challenging the methodology Dr.
18 Boehm employs” (Pl.’s Hiltner Resp. at 10), Ms. Hiltner clearly criticizes Dr. Boehm’s cleanup
19 benchmarks employed as part of his risk assessment methodology. (*See* DeBord Hiltner Decl.,
20 Ex. B at 3.) Though Ms. Hiltner may have dealt with issues regarding environmental risk
21 assessment in her role as a remedial project manager for the EPA, in this case, Ms. Hiltner’s
22 rebuttal opinion amounts to lay speculation given her general reliance on a previous health risk
23 assessment she did not conduct nor has expertise in. *See Kinder Morgan Energy Partners, L.P.*,

1 159 F. Supp. 3d at 1199; *see also Stockton E. Water Dist. v. United States*, 109 Fed. Cl. 760, 783
2 (Fed. Cl. 2013) (finding long-time employee of water district was not qualified to opine as an
3 expert witness on water usage by a city). As such, her rebuttal opinions with respect to Dr.
4 Boehm will be excluded.

5 Likewise, Ms. Hiltner lacks the foundation of knowledge, skill, and experience to qualify
6 her to identify flaws to rebut the opinions of Dr. Kavanaugh. Dr. Kavanaugh, as a certified
7 professional chemical and environmental engineer with expertise site remediation, assessed the
8 remedial outlook of the LDW in the absence of PCBs. Based upon sampling for different
9 non-PCB constituents of concern identified in the ROD, Dr. Kavanaugh examined remedial
10 technologies selected by EPA and how each selected technology would have changed in the
11 absence of PCBs. (*See* DeBord Decl., Ex. H (dkt. # 637-8); *see also* Wishik Decl., Ex. B (dkt.
12 # 651-2) at iii (opining that “[l]ess than 4% of projected future costs for the LDW remediation
13 are attributable to the presence of PCBs alone.”), 50-51.)

14 Here, unlike the City’s expert Dr. Mark Velleux, Ms. Hiltner did not undertake any
15 mapping or analysis with respect to specific constituents of concern or remedial technologies to
16 rebut Dr. Kavanaugh. (*See* dkt. # 772 at 5-8.) Instead, her opinions cite to excerpts of various
17 EPA documents to suggest Dr. Kavanaugh’s opinion does not accord with EPA’s treatment of
18 PCBs. (DeBord Hiltner Decl., Ex. B at 6-7.) Similar to her rebuttal of Dr. Boehm, Ms. Hiltner’s
19 opinion amounts to irrelevant lay speculation on a matter requiring technical expertise, and as
20 such, is excluded from use at trial. *See Kinder Morgan Energy Partners, L.P.*, 159 F. Supp. 3d at
21 1199; *see also Moses v. Payne*, 555 F.3d 742, 756 (9th Cir. 2009) (“[E]xpert testimony is helpful
22 to the jury if it concerns matters beyond the common knowledge of the average layperson and is
23 not misleading.”).

1 **IV. CONCLUSION**

2 For the foregoing reasons: (1) the City's Sunding Motions (dkt. ## 615, 617) are
3 GRANTED; (2) the City's Eaton Motion (dkt. # 619) is GRANTED; (3) Defendants'
4 DeGrandchamp Motion (dkt. # 628)) is DENIED; and (4) Defendants' Hiltner Motion (dkt.
5 # 635) is GRANTED in part and DENIED in part.

6 Based on the Court's rulings: (1) Dr. Sunding's expert report is excluded; (2) Dr.
7 Sunding's supplemental expert report is stricken; (3) Dr. Eaton's first major opinion that "levels
8 of PCBs measured in edible seafood in the LDW do not make them unsafe for human
9 consumption" in his November 21, 2021 expert report, and its supporting testimony and
10 discussion, are excluded; (4) Dr. Eaton's July 7, 2022 supplemental report is stricken; and (5)
11 Ms. Hiltner's rebuttal opinions as to Dr. Boehm and Dr. Kavanaugh are both excluded.

12 The Clerk is directed to send copies of this Order to the parties and to the Honorable
13 Richard A. Jones.

14 Dated this 26th day of October, 2023.

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16 MICHELLE L. PETERSON
17 United States Magistrate Judge
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